Appl. No. 10/707,274

Reply to Non-Final Office Action Mailed 10-03-2007

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## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1-30 (Canceled)
- 31. (Currently amended) A sleeve assembly for a well logging tool of the type having a conductive mandrel and an antenna array disposed around the mandrel, the sleeve assembly comprising:

a <u>one-piece</u> sleeve having an outer surface and an inner surface, and a sleeve hole extending from the outer surface to the inner surface, the sleeve adapted to be disposed over the antenna array such that the outer surface is directed outward from the mandrel; and

an electrode disposed within the sleeve hole and extending <u>radially inward</u> from the outer surface <u>of the sleeve hole</u> [[to]] <u>and terminating proximate</u> the inner surface <u>of the sleeve hole</u> and adapted to conductively connect to the mandrel, the electrode having an external section that is larger than a base section, the external section positioned proximate the outer surface and the base section disposed within the sleeve hole proximate the inner surface.

- 32. (Previously presented) The sleeve assembly of claim 31, further including a wrap disposed about the base section.
- 33. (Previously presented) The sleeve assembly of claim 31, further including a filler positioned between the electrode and the sleeve.
- 34. (Previously presented) The sleeve assembly of claim 32, further including a filler positioned between the sleeve and the electrode and the wrap.
- 35. (Previously presented) The sleeve assembly of claim 31, wherein the sleeve hole is formed through a non-conductive material of the sleeve.
- 36. (Previously presented) The sleeve assembly of claim 32, wherein the sleeve hole is formed through a non-conductive material of the sleeve.
- 37. (Previously presented) The sleeve assembly of claim 34, wherein the hole is formed through a non-conductive material of the sleeve.

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38-60 (Canceled)

61. (Previously presented) The sleeve assembly of claim 31, wherein the external section includes an exposed outside surface area positioned relative to the sleeve and the hole for exposure to the borehole environment, and wherein a surface area of the exposed outside surface is substantially larger than a cross-sectional area of the base section.